



# ***Archeology: History Found in Pieces***

Grades 5-12



How do we learn from what others left behind? What will others learn from us in the future?

A curriculum-based education program created by the Independence Park Institute at Independence National Historical Park



Independence Park Institute



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### Image Credits (front cover)

Courtesy Independence National Historical Park

**A Note to Teachers:** These lesson plans are designed to teach students about archeology. Feel free to make as many copies as you need. You can also download this as a PDF from the education web page at [www.nps.gov/inde](http://www.nps.gov/inde). As you teach your students about archeology, keep in mind that archeological sites are fragile and easily damaged. Proper study of sites requires painstaking work by carefully trained personnel. Careless excavation is always illegal on public lands and can destroy our heritage

# Introduction

Welcome!

In this education program, students will develop an understanding of archeology by exploring James Dexter, documents, artifacts, and the process and value archeology plays in helping us learn history.

Teachers should use the lesson plans to help their students investigate both primary and secondary sources, and to discuss their importance to historians and archeologists. Students will develop into archeologists as they use the information presented in the lesson plans.

The lesson plans are to be completed before your visit to Independence National Historical Park for the *Archeology: History Found in Pieces* program. When students arrive at the park, they will experience a hands-on, interactive, ranger-led program; after which they will explore the park sites related to their learning, especially the public archeology lab and Franklin Court ghost structure and Fragments of Franklin Court.

We hope that you and your students enjoy learning about archeology through this education program. We'd love to hear your feedback as we are always striving to improve our programs and curriculum materials.

Thank you,

The Independence Park Institute...



... at Independence National Historical Park



# Before Your Visit: Lesson #1

## What is Archeology?

(Expected Class Sessions to Complete: 1)

### Objectives:

Students will understand the basic principles of archeology.

### Materials:

- chart paper, chalk board, or overhead
- <http://www.nps.gov/archeology/sites/npSites/franklincourt.htm> (for reference)

### Standards Correlation:

PA Academic Standards for History: 8.1 A, C, D; 8.2 B

NJ Core Curriculum Content Standards for Social Studies: 6.1 A; 6.4 A

### Introduction:

Open the lesson by putting the following writing prompt on the board or overhead projector. “What can people learn about you by looking at your trash?” Allow the students time to write their responses. Have students limit their responses to a page and then ask for volunteers to share with the class. Then, as students share, start a T-Chart list on the board or overhead to keep track of the different kinds of information that can be gained and from what piece of trash. For example- broken toys/ children in the house, empty food jars/ diet, old homework/ what school is like, etc. Historical archeologists look at trash in much the same way, only the trash they look at is hundreds of years old.

### Procedure:

The teacher should facilitate a discussion about what archeology is (studying artifacts left behind by humans) and what it is not (studying dinosaur bones) and explain that there are different types of archeology. Archeology encompasses the history of man in both prehistoric times (the time before man had written language) and historical (after the appearance of written records). Historical archeology, that will be the focus of these lessons, is defined as the archeological studies of people documented in recent history including early America. In Philadelphia and at Independence National Historical Park, most archeology is historical archeology. Historical archeologists study underwater ship wrecks and historical sites like Franklin Court and Mount Vernon. By the end of the discussion students should understand that archeology is the study of the way people lived in the past and archeologists learn about the past by studying the things people leave behind like buildings, pottery, tools, and graves.

Closing:

Refer back to the opening activity and compare the T-Chart list from the students writing to historical archeologists excavating and examining the remains of an 18<sup>th</sup> century privy pit, trying to learn about the people who lived there and threw their trash into that pit over 200 years ago. Looking at the list students came up with for their trash, how many of the items would survive if they were buried in the ground for two hundred years? If you analyzed only those artifacts that still remained, would your conclusions change? If so, how?

## Before Your Visit: Lesson #2

# The Archeological Process- Why do it and how is it done?

(Expected Class Sessions to Complete: 1 to 2)

### Objectives:

Students will understand that archeology is a scientific process and that it involves research and precision. They will know why archeologists excavate a site and why it is sometimes better not to excavate. The students will learn the steps involved in archeology.

### Materials:

- To Excavate or Not to Excavate worksheet for each group of students
- Archeology Step-by-Step worksheet for each student
- <http://www.nps.gov/inde/james-dexter-site.htm> (for reference, teacher may want to read for Dexter content)

### Standards Correlation:

PA Academic Standards for History: 8.1 C, D; 8.2 A, B

NJ Core Curriculum Content Standards for Social Studies: 6.1 A

### Introduction:

Archeologists do not excavate unless there is a compelling reason to do so. The students will be presented with two cases where archeology happened within Independence National Historical Park. The students should work in groups to decide in each case if there was a “compelling reason” to excavate the site. Have the students list their reasons for or against excavating on the case study worksheet.

Case #1 – Basement and foundation area of the National Constitution Center (NCC)

Case #2 – Bus drop-off area at the National Constitution Center (NCC)

After student groups have had time to review each case study and make a decision, have them share their decisions and reasons with the class. Then, share with the students that the National Park Service (NPS) archeologists decided to excavate at both locations and their reasons for doing so in each situation. The details to these site excavations can be found in the website above. Does the class agree? Once a decision has been made to excavate, a plan must be constructed and steps followed to ensure that the excavation is a successful one.

Procedure:

Tell the students that excavation or “the dig” is just one of many steps in the archeological process. Hand out the Archeology Step-by-Step worksheet. The steps are in order and the students need to define what each step entails. You may have them take their best guess and then discuss their answers as a class, or have the students look the information up in a dictionary or online.

Closing:

Reinforce that “the dig” is not done without a compelling reason, whether that reason is because the site will be destroyed due to construction or if the public has a need to know more about their history. Teachers may want to use the analogy that an archeological dig is like reading a book in which every page must be ripped out and thrown away as soon as it is read. It is not possible to go back and reread a page for missed information. Archeologists need to record everything that they can because they only have one opportunity to excavate a site. Once the soil and artifacts are removed, that site has been disturbed. Archeologists do not excavate if they do not have to because in the future there may be better means of researching or researchers may want to ask different questions.

Name \_\_\_\_\_  
Group Members \_\_\_\_\_

## **To Excavate or Not to Excavate, That is the Question.**

Case #1 – Basement and foundation area of the National Constitution Center

The National Constitution Center (NCC) was designed to take up about two-thirds of the block between Arch and Race Streets and 5<sup>th</sup> and 6<sup>th</sup> Streets. The NCC was established by Congress and has the mission to increase awareness and understanding of the US Constitution and its relevance in today's society. There will be deep foundations and a bi-level underground garage. Given the scale of the building, significant disturbance of archeological resources is unavoidable.

Would you excavate? Yes or No

Please give your reasons in the space below.



## Case #2 – Bus drop-off area at the National Constitution Center (NCC)

The bus drop-off area for the NCC is the site where James Dexter, one of six free African American heads of household on the block, once lived. Historical research revealed that Dexter was instrumental in the founding of the African Episcopal Church of St. Thomas and held one of the first founding meetings in his home. This church, founded 1792-1794, is very important to American history because this is one of the first churches in the country owned and operated by a congregation of free blacks living in the city. The bus drop-off could be built on top of the site without causing damage to the archeological resources of the Dexter Site. The NPS makes it a practice not to dig if the resource can be preserved intact to be excavated at a later date. However, representatives from St. Thomas and other community organizations feel that the knowledge that could be gained through excavating the Dexter site warrants excavation.

Would you excavate? Yes or No

Please give your reasons in the space below.

Name \_\_\_\_\_

## Archeology Step-by-Step

Directions: The steps of the archeological process are listed below. Next to each step, write what is involved, what tools you would need, and how you would do it.

Step:

1. Site Selection

- a. Research Design \_\_\_\_\_
- b. Permits \_\_\_\_\_
- c. Research \_\_\_\_\_

2. Site Survey

- a. Measurements \_\_\_\_\_
- b. Excavation unit setup \_\_\_\_\_

3. Excavation

- a. Heavy Machinery \_\_\_\_\_
- b. Small Tools \_\_\_\_\_
- c. Screening \_\_\_\_\_
- d. Bagging \_\_\_\_\_

4. Laboratory Processing and Analysis

- a. Washing \_\_\_\_\_
- b. Sorting \_\_\_\_\_
- c. Cataloging \_\_\_\_\_
- d. Artifact analysis \_\_\_\_\_

5. Reports and Publications

- a. Reports \_\_\_\_\_
- b. Exhibits \_\_\_\_\_
- c. Presentations \_\_\_\_\_

# Archeology Step-by-Step Teacher Answer Key

## Step 1: Site Selection

Research Design- This is the initial action step of any excavation. This is the proposal of the work to be accomplished and the action plan of how to do it.

Permits- Planning and construction applications and permits must be reviewed before building projects can disturb the ground and possibly endanger archeological resources.

Research- Historians and archeologists complete archival research to learn as much about a site that is to be excavated as possible before the actual dig.

## Step 2: Site Survey

Measurements- A tool called a transit is used to find the precise location and helps set up the grid on the site.

Excavation units set up- the site is marked off in grid squares marked with string so that the provenience, or location on the site in relation to other features, of an artifact or feature can be recorded.

## Step 3: Excavation

Heavy machinery- If needed, big dirt movers remove the top layers of soil that have already been disturbed.

Small tools – Once the top layers of soil are gone archeologist excavate the rest of the site by hand using shovels and trowels.

Screening – Soil that is recovered by archeologists is deposited into buckets then carried to large screens and sifted to make sure that all the small artifacts have been recovered.

Bagging – All artifacts collected are placed in bags and labeled according to their provenience (location on the site in relation to other features) so that analysis may be done later.

## Step 4: Laboratory Processing and Analysis

Washing- Artifacts are carefully washed to remove dirt.

Sorting- Artifacts are sorted by context or provenience (location on the site in relation to other features) and they are further sorted by what kind of material they are made out of, like glass, wood, bone, or shell

Cataloging- Information about each artifact is entered into a computer so that studies can be conducted and information about what was found can be attained easily and quickly.

Artifact analysis- Each artifact must be studied to determine its date and place of manufacture, how it was used and by who. The dates of artifacts can help date the site or a specific feature.

## Step 5: Reports and Publications

Reports- Archeologists write up reports on their findings so that other archeologists and historians can learn from their research.

Presentations- Archeologists give lectures and presentations to other archeologists, historians, and the general public so that all can learn from their research and know the importance of preservation.

Exhibits- Exhibits on archeological sites are created so the public can learn about the past and the importance of preservation.

## Before Your Visit: Lesson #3

# Historical Document Research

(Expected Class Sessions to Complete: 1 to 2)

### Objectives:

Students will be able to tell the difference between a primary and a secondary resource. Students will understand why historical document research is important to historical archeology and what sort of information can and cannot be learned by looking at documents.

### Materials:

- 1794 map of Philadelphia
- Current map of Philadelphia
- Copies of Dexter primary source documents with transcriptions (copy document on front with transcription on back)
  - Elizabeth Drinker diary excerpts
  - 1782 petition to the Commonwealth of Pennsylvania Supreme Executive Council
  - Undated petition signed by James Dexter
  - A Sunday Morning view of the African Episcopal Church of St. Thomas in Philadelphia
  - The 1794 Philadelphia Directory and Register
  - Dexter Manumission Papers
  - Isaac Zane and James Pemberton accounts of Dexter
  - Priss Manumission Papers

### Standards Correlation:

PA Academic Standards for History: 8.1 (all); 8.2 A, B

NJ Core Curriculum Content Standards for Social Studies: 6.1 A; 6.4 A; 6.6 B

### Introduction:

Have students locate the site of James Dexter's home on a 1794 map of Philadelphia. Discuss the following questions. What was the area like? What can we learn looking at the 1794 map of Philadelphia? Where did most people live? Where were businesses located? Why? Then have the students find the site of Dexter's home on a current map of Philadelphia. What is the area like now? Compare and contrast. This activity can be done in small groups or as a class.

### Procedure:

Ask the class, how do historians, archeologists, and others learn about the past? Have the students list some primary source documents and some secondary source documents that could be used to learn about the past. Discuss the strengths and weaknesses of using different sources.

Divide the students into groups of three or four. Hand out the primary source documents related to James Dexter with their transcriptions.

For **grades 5-7** give each group of students one document (a different document for each group). Ask them to read the document and find out as much as they can about James Dexter. They will share this information with the class as well as what kind of document it came from. Then, with the class as a whole, combine the information from all the documents to write a biography of Dexter. Be sure to cite the sources where the information was found. As a class, decide what other information people may want to know about Dexter. How might that information be found? Could archeology help?

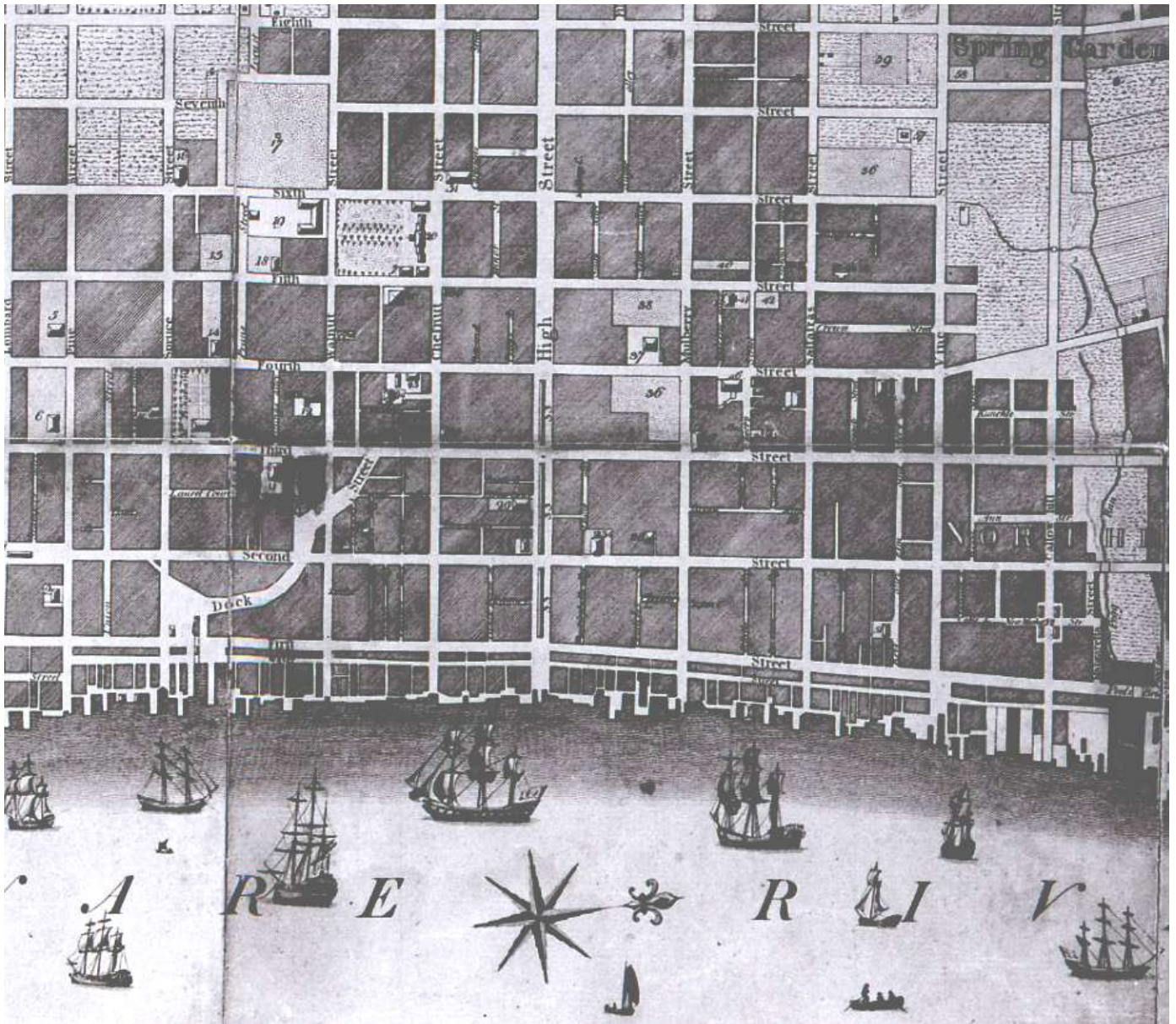
For **grades 8-9** give each group of students two or three documents (different documents for each group, some may be repeated). Ask them to read their documents and find out as much as they can about James Dexter. Ask them to write a biography for Dexter based on the information they found in their primary source documents. Be sure to cite the sources where the information was found. Then, the students will share this information with the class. They can then discuss the different biographies and see how more research helps to fill out the picture of who Dexter was. Then with the class as a whole, combine the information from all the documents to write a class biography of Dexter. Ask the students what other information people may want to know about Dexter. How might that information be found? Could archeology help?

For **grades 10-12** give each group of students all of the documents. Have each group write a biography on James Dexter using their primary source documents. Be sure to have them cite their sources. Then have each group share their biographies. Discuss the similarities and differences between each biography. What assumptions did the students draw? Discuss the biographies as secondary source documents. Ask the students what other information people may want to know about Dexter. How might that information be found? Could archeology help?

### Closing:

Have a whole class discussion on what an archeologist can learn from primary source documents and why they want to research before starting an excavation.





1794 Map of Philadelphia (Detail)  
 Courtesy of Independence National Historical Park

### **James Oronoco Dexter (Example Biography and Resource Information)**

James Oronoco Dexter lived at 5<sup>th</sup> Street between Arch and Race Streets. Oronoco lived there with 6 other people. The house was 2 stories high, built of brick, and was very plain. The house was new when Oronoco moved into it in 1790. He lived there until 1798. The house no longer stands. It was torn down by 1857.

Early in his life Oronoco had been held in slavery by Henry Dexter. Henry Dexter gave Oronoco to his son James. In 1767, Oronoco bought his freedom. He also bought the freedom of a young woman named Priss in the same year. Oronoco and Priss were married soon after.

Oronoco was a member of a new church just established by Absalom Jones. He hosted a meeting with the elders and deacons at his house. And he served on a committee to plan the building of the church.

Oronoco made his living as a coachman. He worked for a Quaker named John Pemberton. Oronoco drove the Pembertons and their friends in their horse drawn coach.

Look at the documents for more clues about James Oronoco Dexter's life.

Elizabeth Drinker was a close friend of the Pemberton family. She kept a diary. Oronoco Dexter is mentioned in it. She often refers to him by a nickname, Noke.

(Transcription of a selection of diary entries)

### **July 13, 1789**

“Noke came for me, took a short ride with HP (Hannah Pemberton)...

### **November 6, 1793** (*during Yellow Fever Epidemic*)

Pemberton’s Noke came this morning from the City, he says that the day before yesterday, there was no burial in Friends ground, Yesterday three, one of them was the wife of Samuel Garrigas, and that, this day there was no grave open’d there.

### **March 1, 1796**

Oronoko came this morning to know if I would ride with his Mistress, I agreed—he came for me about 11 o’clock, we rode about the city till one, when he drove me home to dinner.

### **August 10, 1799**

John Drinker called here—Oronoko is dead, our Jacob went to his funeral, many a pleasant ride have I taken with his Mistress under his care and protection, poor Noke.”



Philadelphia April 2<sup>d</sup> 1782  
 To his Excellency Governor Moore  
 & his Honourable Counselors

The Humble Petition of the Black  
 people of the City and Suburbs Humbly  
 craveth Liberty of your Honours and  
 your protection to fence in the  
 Negroes Burying ground in the Lotter  
 field & your Petitioners will pray

John Black  
 Samuel Smith  
 oronoca Baxter  
 Cuff Duglas  
 Abram Duglas  
 William Gray

oronoca Baxter  
 Cuff Duglas

1782 petition to the Commonwealth of Pennsylvania  
 Supreme Executive Council  
 Courtesy of the Pennsylvania Archives

Philadelphia April 7, 1782

To his Exalency Governor Moore & his Honourable Counselers

The Humble Petition of the Black people of the City and Suburbs Humbly craveth liberty of your Honours and your protection to fence in the Negroes Burying ground in Potters field your petitioners will pray.

John Black  
Samuel Saville  
Oronoco Dexter  
Cuff Duglass  
Aram Prymus  
William Gray

We humbly Petition you that you will be pleased to inquire into the grievances of which we have complained and — And we conceive the welfare of Nations depends in the Equally distributing of Justice, that you may look forward and Cooperate in Judgment with your Predecessors, <sup>the Just Congress</sup> that we have with other men <sup>have</sup> an Unalienable Right to life Liberty & the pursuit of happiness, so that nothing may be wanting on your part to facilitate so desirable an object, opening a door for a gradual Emancipation to take place, and likewise to look forward preparing a way and assistance for such as may incline <sup>who are free</sup> to resort, similar to the one prepared by the British in Vermont so that such of us that are furnished with Liberty may have it in our power to become more Usefull to the Community at Large who are now at a loss for a livelihood for ourselves & families

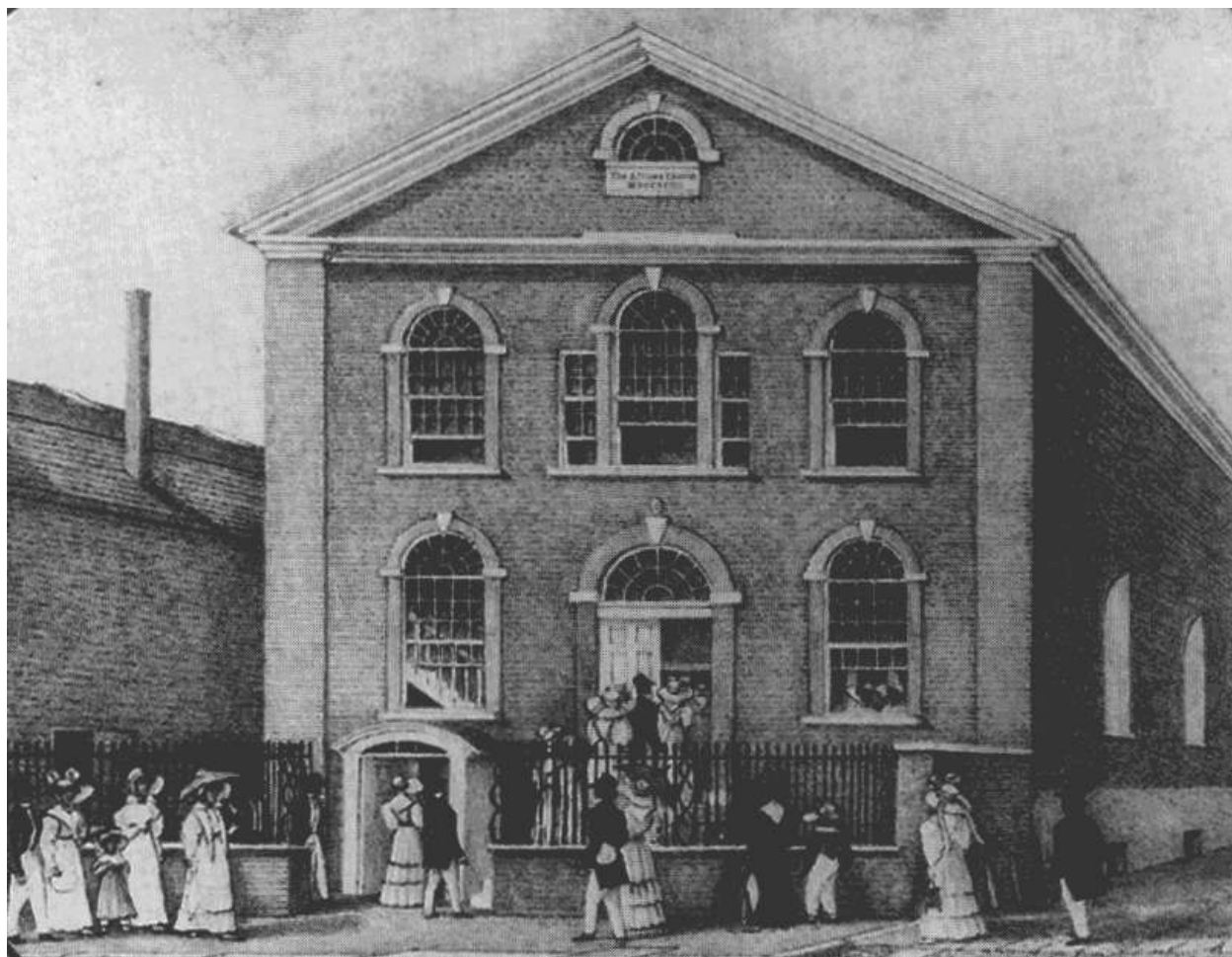
Undated Petition signed by James Dexter, Cox-Parish —Wharton Papers, Collection #154  
Courtesy of the Historical Society of Pennsylvania

*Transcript of draft petition from about 1791.*

We humbly Petition you that you will be pleased to inquire into the governances of which we have complained and—and we conceive the wellfair of nations depends in the Equally distributing of Justice, that you may look forward and \_\_\_\_\_(Corporate?) in Judgement with your Predecessors the first Congress that we have with other men have an Unalinauble Right to life Liberty & pursuit of happiness, so that nothing may be wanting on your part to facilitate so discernable an object of opening a door for a gradual Emancipation to take place, and likewise look forward preparing a way an asylum for such as may meline who are free, to resort, similar to the one prepared by the British in Serealluone (Sierra Leone?) so that such of us that are favoured with Liberty may have it in our power to become more useful to the Community at Large who are now at a loss for a livelihood for ourselves & famleys.



The African Episcopal Church of St. Thomas was built in 1794. Church records show that Oronoco Dexter hosted a meeting of the Elders and Deacons at his house on 5<sup>th</sup> Street in 1792. He also served on the committee that planned the building of the church.



A Sunday Morning View of the African Episcopal Church of St. Thomas in Philadelphia  
By William L Brenton (1829)  
Courtesy of the Episcopal Church of the United States

The 1794 Philadelphia Directory and Register shows James Dexter's address and occupation.

THE  
PHILADELPHIA  
D I R E C T O R Y  
AND  
REGISTER:

CONTAINING  
THE NAMES, OCCUPATIONS, AND PLACES OF ABODE OF  
THE CITIZENS, ARRANGED IN ALPHABETICAL ORDER:

A REGISTER  
OF THE EXECUTIVE, LEGISLATIVE, AND JUDICIAL  
MAGISTRATES OF THE UNITED STATES AND THE  
STATE OF PENNSYLVANIA, WITH THEIR SALARIES; THE GOVERNORS OF THE DIFFERENT STATES, AND THE MAGISTRATES OF THE CITY:

TO WHICH IS ADDED,  
A SHORT ACCOUNT OF THE CITY; AND OF THE CHARITABLE AND LITERARY INSTITUTIONS THEREIN.

THE SECOND EDITION.

By JAMES HARDIE, A. M.

PHILADELPHIA:

Printed for the Author, by JACOB JOHNSON & CO. No. 147, Market-Street.

M DCC XCIV.

[Price 62 1/2 Cents.]

PHILADELPHIA DIRECTORY.

39

Deves Lewis, blacksmith, Prime St. Southwark.  
Deveny William, boarding house, 339, High St.  
Deveze John, M. D. 161, Mulberry St.  
Deveze Lewis, nailor, 252, Swanion St.  
Dewees Benjamin, cordwainer, 16, Saffras St.  
De Wees William, physician, 85, Elm St.  
Dexter James, coachman, 84, No. Fifth St.  
Dexter Isabella, widow, 20, Coomb's Alley.  
Dexter Richard, cordwainer, 6, Chancery Lane.  
Diamond Conrad, huckster, 342, No. Second St.  
Diamond Daniel, labourer, 92, Shippen St.  
Dick Daniel, shopkeeper, 17, So. Front St.  
Dick Frederic, tailor, 24, So. Water St.  
Dick John, ship carpenter, Mary St. Southwark.  
Dick Margaret, widow, shopkeeper, 232, So. Second St.  
Dick Peter, chocolate manufacturer, 69, So. Front St.  
Dick Peter, grocer, 208, So. Third St.  
Dick Philip, tailor, 26, So. Water St.  
Dick Philip, grocer, 132, No. Third St.  
Dickerson Daniel, lumber merchant & millwright, 70, No. Fourth St.  
Dickerson John, millwright, 411, No. Front St.  
Dickers Ann, widow, back 396, No. Front St.  
Dickins John, minister of the methodist church, 118, No. Fourth St. his book-store, 44, No. Second St.  
Dickinson Daniel, glover & breechmaker, 32, So. Second St.  
Dickinson Jonathan, jeweller, 73, High St.  
Dickinson Mary, widow, 40, So. Fourth St.  
Dickinson Morris, bookbinder, 38, So. Fourth St.  
Dickinson Philemon, gentleman, Chestnut between Sixth and Seventh Sts.  
Dickinson Thomas cordwainer, 80, So. Front St.  
Dickinson William, labourer, 9, Elmie's Alley.  
Dickinson William, house carpenter, 112, Spruce St.  
Dickinson ———, widow, 18, Prun St.  
Dickson John, mariner, 246, So. Front St.  
Dickson Patrick, labourer, 1, Stamper's Alley.  
Dicky Mary, widow, 6, Crab St. Southwark.  
Diehl Nicholas jun. attorney at law, 19, So. Fourth St.  
Diel Christopher, baker, Cherry between Seventh & Eighth Sts.  
Dietz Frederic, tavernkeeper, 408, So. Second St.  
Diget Henry, painter and glazier, Filbert between Eighth & Ninth Sts.  
Dill Adam, baker, 121, Pine St.  
Dillon Benjamin, rigger, Cherry between Fifth and Sixth Sts.

The Philadelphia Directory and Register  
By James Hardie, A.M. 1794  
Courtesy of the American Philosophical Society



I now all men by this presents that we the subscribers surviving Trustees for the creditors of James Dexter and to whom the Estate of the said James Dexter both real and personal was entrusted made over have received thro the Hands of Joseph Yeates and of Oronoko royal Slave One hundred pounds a full compensation for the said Oronoko and therefore neither we our heirs nor any of the Creditors of the said James Dexter do or can claim any Right in or to the said Oronoko. In Witness whereof we have hereunto set our Hands and Seals this Third Day of August  
AD 1767

Signed & Sealed  
in the presence of

Aphoton Humphreys

Am. Elvire

Christopher Marshall

Chas. Thompson

Peter Wickoff

The this Day of August in the Year of our Lord 1767 Before me James Humphreys Esq One of his Majesty's Justices of the Peace for the City & County of Philad<sup>a</sup> Came the above named Christopher Marshall, Charles Thompson & Peter Wickoff & acknowledged the above written Instrument to be the several and respective Acts &

Pennsylvania Abolition Society Papers,  
Manumissions, Etc.

Oronoko's Manumission, 1767

Courtesy of the Historical Society of Pennsylvania

Know all men by these presents that we the subscribers surviving Trustees for the Creditors of James Dexter and to whom the Estate of the said James Dexter both real and personal was in trust made over have received thro the Hands of Joseph Yeates and of Oronoko royal Slave One hundred pounds a full compensation for the said Oronoko and therefore neither we our heirs Exr. nor any of the Creditors of the said James Dexter do or can claim any Right in or to the said Oronoko. In Witness whereof we have hereunto set our Hands and Seal this third Day of August AD. 1767

Signed and Sealed  
In the presence of  
Assheton Humphreys  
Wm Claire

Christopher Marhall  
Cha Thompson  
Peter Wikoff

*Examination to James Dexter  
Manumission  
to  
Oronoko  
Sept 3. 1767  
Recorded in a Book  
Kept by the man & meetings  
of Trustees of the said  
the said Oronoko  
Fol: 222  
John Drinker  
Recorded in the  
Book of the same  
Sept 3. 1767  
John Drinker*



1787

James Cronque Dexter, a Black Freeman, when young and in slavery was hired by his master to the keeper of a Tavern in this City, and being of an obliging behaviour gained the good will of those who frequented the house so that <sup>by</sup> presents he received from them in the space of four years he had saved to the amount of fifty Pounds; his master dying in debt, he became the property of his creditors, who being acquainted with his good Character for sobriety & honesty, & his desire of freedom, agreed he should be put into possession of it on payment of One hundred Pounds within two years, which he engaged to do in the space of nine months, and with punctuality performed. After which being desirous of settling in life, and inclining to marry he fixed on a young woman of reputation, and obtained the consent of her possessor, who held her in so high estimation that he rated the price of her redemption from slavery at so great a rate, that Cronque could not comply with the terms, and therefore for some time declined further proceeding, until at length through the interposition, and influence of a friend he was prevailed upon to take fifty Pounds for her freedom, which was paid to her possessor by Cronque having

having by his industry gained thirty pounds of the money, and the other part was lent by two<sup>d</sup> his friends, whom he carefully repaid declining to marry until he had done it; after which he settled, and they lived together many years with reputation being industrious and worthy, Confidant, and since the decease of his wife he has conducted with Sobriety, & Steadiness; having known him more than ten years I have had much opportunity of observing his behaviour, and proceedings, I do not know a labouring man whom I should prefer to employ, or who is more to <sup>be</sup> confided in, his humanity in assisting and Relieving those of his own colour under difficulty is also conspicuous as far as is in his power, which with his conscientious principles render him a Truly worthy Character.

Isaac Lane.

Philadelphia 16th 8<sup>th</sup> mo 1787

Being well acquainted with the above named James Oronoque Dexter, I can fully testify my concurrence with the Character given of him in the foregoing narrative, and as he has lived in the family of my brother John Pemberton several years at annual wages, frequent opportunities have occurred to my observation of his Steady prudent conduct, diligence in business, & faithful attention to the Interest of his master since, as before his late long absence from home.

Philadelphia 16: 8<sup>th</sup> mo 1787

John Pemberton

Pennsylvania Abolition Society Papers,  
Manumissions, Etc.

Testimony in behalf of James Oronoque Dexter, 1787  
Courtesy of the Historical Society of Pennsylvania

James Oronoque Dexter a Black Freeman, when young and in Slavery was hired by his master to the Keeper of a Tavern in this city, and being of an obliging behavior gained the good will of those who frequented the house so that by presents he Renewed from them in the space of four years he had saved to the amount of fifty Pounds: his master dying in debt, he became the property of his Creditors, who being acquainted with his good Character for sobriety & honesty, & his desire of freedom, agreed he should be put into possession of it on payment of one hundred Pounds within two years which he engaged to do in the space of nine months, and with punctuality performed. After which being desirous of settling in life, and inclining to marry he fixed on a young woman of reputation, and obtained the Consent of her possessor who held her in so high estimation that he rated the price of her redemption from Slavery as so great a rate that Oronoque could not comply with the terms, and therefore for some time declined further proceeding until at length through the interposition, and influence of a friend he was prevailed upon to take fifty Pounds for her freedom, which was paid to her possessor by Oronoque lent by two of his friends, whom he carefully repaid declining to marry until he had done it; after which he settled and they lived together many years with reputation being Industrious and worthy of Confidence, and Since the decease of his wife he has Conducted with Sobriety, & Steadiness; having known him more than ten years I have had much opportunity of observing his behaviour, and proceedings, & do not know a labouring man whom I should prefer to employ, or who is more to be confided in, his humanity in assisting and Relieving those of his own Colour and difficulty is also conspicuous as far as is in his powers which with his conscientious principles render him a Truly worthy Character

Philadelphia 16<sup>th</sup> 8 month 1787

Isaac Zane

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Being well acquainted with the above named James Oronoque Dexter, I can freely testify my concurrence with the character given of him in the foregoing narrative, and as he has lived in the family of my brother John Pemberton several years at annual wages, frequent opportunities have occurred to my observation of his steady prudent conduct, diligence in business, & faithful attention to the Interest of his master Since, as before his late long absence from home.

Philadelp 16 8mno 1787

James Pemberton



To all People to whom these Presents shall come I William Jones of the City of Philadelphia in the Province of Pennsylvania Greeter send Greeting That for and in Consideration of the Sum of five Pounds lawful Money of the said Province unto me in hand well and truly paid by Name of the said City and for divers other good Causes and Considerations more specially moving I have manumitted and released and discharged by these Presents do manumit free release and discharge my Negro Woman named Priss aged about 25 Years of and from all Manner of Slavery Bondage Service of Slavery and Duty of Servitude hereafter to accrue or to be done or demanded by me my Heirs Executors or Administrators by any Law Usage or Custom And all my Estate Right Title Interest Properly claim and Demand of in and to the same negro Woman named Priss for ever as fully freely and absolutely as If the said William Jones may might or could have held and enjoyed by any means whatsoever In Witness whereof I have hereunto set my hand and seal dated at Philadelphia the twenty third day of the twelfth Month in the Year one thousand seven hundred and Sixty seven.

Sealed and delivered  
In the presence of  
Christopher Marshall  
John Pemberton

William Jones *WJ*

Pennsylvania Abolition Society Papers,  
Manumissions, Etc.  
Manumission for Priss, 1767  
Courtesy of the Historical Society of Pennsylvania

To all People to whom these Presents shall come I William Jones of the City of Philadelphia, in the Province of Pennsylvania, Grazier send Greeting. Know Ye that for and in Consideration of the Sum of sixty Pounds lawful Money of the said Province unto me in hand well and truly paid by Noake of the said City and for divers other good Causes and Considerations me specially moving I have manumised freed released and discharged &c by these Presents do manumise free release and discharge my Negro Woman names Priss aged about 25 Years of and from all Manner of Slavery Bondage Service of Slavery and Duty of Servitude hereafter is accrue or to be done or demanded by me my Heirs Executors or Administrators by any Law Usage or Custom And all my Estate Right Title Interest Properly Claim and Demand of in and to the same negro Woman named Priss for ever as fully freely and absolutely as I the said William Jones may might or could have held and enjoyed her by any means whatsoever In Witness whereof I have hereunto set my hand and Seal dated at Philadelphia the twenty third day of the twelfth Month in the Year one Thousand Seven hundred and Sixty seven.

Sealed and delivered  
In the presence of  
Christopher Marshal  
John Pemberton

William Jones (L.S.)

## Before Your Visit: Lesson #4

# Digging for Clues!

(Expected Class Sessions to Complete: 1)

### Objectives:

Students will understand the importance of identifying soil levels during archeological excavations and the importance of artifact provenience.

### Materials:

- Copies of the Digging for Clues Answers in Stratigraphy worksheet for each student
- Pictures of stratigraphy during the 2003 excavation at the National Constitution Center

### Standards Correlation:

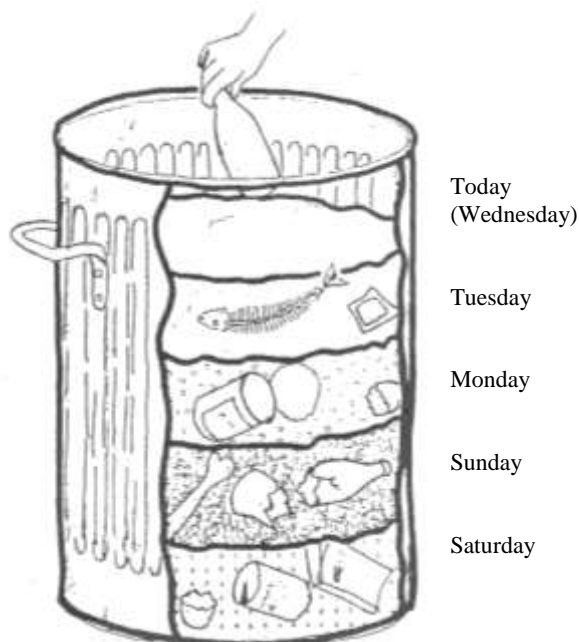
PA Academic Standards for History: 8.1 (all)

NJ Core Curriculum Content Standards for Social Studies: 6.1 A

### Introduction:

Share the following information with the students:

One of the most important aspects of an archeological study is the scientific excavation of the site. This is often done by looking at an artifact's location in relation to soil layers, features, and other artifacts. Archeology itself is done by carefully removing soil layer by layer or by contexts and diligently recording what is found. Once a site has been excavated, the resource and contexts are gone.



Generally, the level of soil closest to the surface of a site will contain evidence of the most recent activity. As you move down through the soil layers, accounts of older activity can be observed. This can change if later inhabitants of the area disturbed the soil by construction, farming, or another destructive activity. Likewise, natural events like a flood can also disturb the strata or soil layers.

With your class, go back to the first lesson where you asked your students “What can people learn about you by looking in your trash?” Only this time, talk about dating

Courtesy of the Baltimore County Center for Archeology

Archeology: History Found in Pieces

your trash for the week. The oldest trash will be in the bottom of the trash can and the trash from today will be at the top.

Procedure:

Tell the students that they get the opportunity to analyze a site by looking at the stratigraphy. They will need to look at the information they are given and make hypothesis about what happened at that site. Hand out the “Digging for Clues, Answers in Stratigraphy” worksheet and give the students time to work on it. You may also have them work in groups. Once the students have completed the worksheet, go over their answers as a class to see if everyone is in agreement.

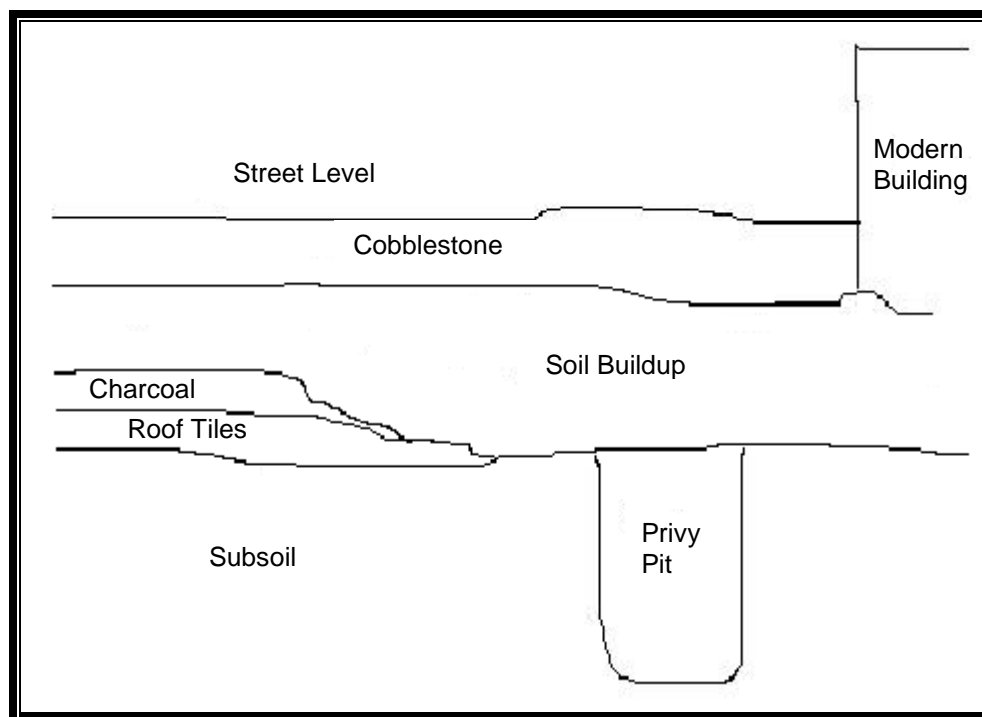
Closing:

With the class, examine the pictures of stratigraphy during the 2003 excavation at the National Constitution Center. Have a discussion about what the archeologists doing the dig may learn using the different soil layers.

Name \_\_\_\_\_

## Digging for Clues, Answers in Stratigraphy.

Directions: Use the drawing to answer the questions.



1. List all the levels in order from the oldest to the most recent.
2. Describe the events that occurred at the site starting with the oldest events.



3. Indicate the difference between the human activities and the natural events.

4. How can you tell time has passed? What clues do you see?

5. What other observations or conclusions can you make?



Images Courtesy of Independence National Historical Park

Archeology: History Found in Pieces

## Lesson #5

# the Effect of Metal reactivity on Archaeological Finds

(Expected Class Sessions to Complete: 1)

This lesson plan was created by Martha Kanaskie, Keystone National High School

### Grade level:

Middle/ High School

### Objectives:

Students will understand how the chemical activity series affects the appearance of metals found in archeological digs, and the affect on data from these digs.

### Standards Correlation:

PA Academic Standards for History: 8.1 (all)

NJ Core Curriculum Content Standards for Social Studies: 6.1 A

### Background:

Metals react to the air and other elements differently. The level of reactivity of metals can be found in the activity series. This is a list of metals from the most to least reactive, with the most reactive being at the top, and the least reactive being near the bottom. Metals such as sodium will react so quickly that they often explode in the presence of oxygen. Other metals, like iron, will react to sulfur and oxygen in the air or ground, but do so very slowly. They will develop a layer of tarnish, or that coats them and often discolors the surface. Metals near the bottom of the chart, like gold, will not tarnish much at all and their appearance will remain relatively unchanged over time.

Metal	Oxidation Reaction
Lithium	$\text{Li} \rightarrow \text{Li}^+ + \text{e}^-$
Potassium	$\text{K} \rightarrow \text{K}^+ + \text{e}^-$
Barium	$\text{Ba} \rightarrow \text{Ba}^{2+} + 2\text{e}^-$
Calcium	$\text{Ca} \rightarrow \text{Ca}^{2+} + 2\text{e}^-$
Sodium	$\text{Na} \rightarrow \text{Na}^+ + \text{e}^-$
Magnesium	$\text{Mg} \rightarrow \text{Mg}^{2+} + 2\text{e}^-$
Aluminum	$\text{Al} \rightarrow \text{Al}^{3+} + 3\text{e}^-$
Zinc	$\text{Zn} \rightarrow \text{Zn}^{2+} + 2\text{e}^-$
Chromium	$\text{Cr} \rightarrow \text{Cr}^{3+} + 3\text{e}^-$
Iron	$\text{Fe} \rightarrow \text{Fe}^{2+} + 2\text{e}^-$
Cobalt	$\text{Co} \rightarrow \text{Co}^{2+} + 2\text{e}^-$
Nickel	$\text{Ni} \rightarrow \text{Ni}^{2+} + 2\text{e}^-$
Tin	$\text{Sn} \rightarrow \text{Sn}^{2+} + 2\text{e}^-$
Lead	$\text{Pb} \rightarrow \text{Pb}^{2+} + 2\text{e}^-$
Hydrogen	$\text{H}_2 \rightarrow 2\text{H}^+ + 2\text{e}^-$
Copper	$\text{Cu} \rightarrow \text{Cu}^{2+} + 2\text{e}^-$
Silver	$\text{Ag} \rightarrow \text{Ag}^+ + \text{e}^-$
Mercury	$\text{Hg} \rightarrow \text{Hg}^{2+} + 2\text{e}^-$
Platinum	$\text{Pt} \rightarrow \text{Pt}^{2+} + 2\text{e}^-$
Gold	$\text{Au} \rightarrow \text{Au}^{3+} + 3\text{e}^-$



## Lab: testing the reactivity of metals

### Materials:

- Aluminum nail,
- iron nail
- copper penny
- lead shot
- silver or gold object
- tin object (metal substitutions are acceptable if tin, gold, or silver are not available)
- 6 glass test tubes
- Test tube rack or racks for holding all of the test tubes
- 3 M hydrochloric acid (or vinegar)

Name \_\_\_\_\_

## Testing the Reactivity of Metals

### Procedure:

Place one metal object into each test tube. Cover with hydrochloric acid (or vinegar) and let sit overnight. Observe immediately, after one hour, and again the next day for the change in appearance and/or bubbles on each object. Use the chart to record the observations.

	Metal before adding acid	Immediately after adding acid	1 hour after adding acid	24 hours after adding acid
Aluminum				
Iron				
Copper penny				
Lead				
Tin				
Gold/silver				

### Conclusion:

Use the chart to show the relative reactivity of each object, based on the observations. The earlier and more bubbles/changes that were noticed, the more reactive the metal is. Compare your results from the experiment to the order of the metals in the activity series. Comment on any discrepancies and propose explanations for the differences.

## PART II- Application to Historic Archaeology

### Background:

The metals that were used in the last two centuries were limited to a few common elements. Lead, tin, copper, iron, gold, and silver are among the most common. As artifacts are uncovered, many metals will reveal themselves in vastly different forms than when they were originally formed years ago. This is due to the corrosion, oxidation, or tarnish they have undergone as a result of their reactivity to the oxygen and other elements in the soil. This reaction is much slower than the reactions observed in acid, but the same relative rates of reaction occur. The elements at the top of the reactivity series will have the most drastic changes. Those near the bottom will remain relatively unchanged

### Materials:

Pictures, or actual artifacts uncovered in archaeological digs from the past two centuries

Name \_\_\_\_\_

## **PART II- Application to Historic Archaeology**

### Procedure:

Based on the metal's reactivity, write a brief hypothesis of what you would expect each object to look like after being buried in damp soil for 200 years. Research the color you would expect each to be, based on the metal oxide that would be produced.

Aluminum nail (aluminum oxide)

Iron nail (Iron III oxide)

Copper penny (copper II oxide)

Lead shot (lead II oxide)

Silver spoon (silver oxide)

Gold coin (gold oxide)

Tin button (Tin IV oxide)

Next, look at the pictures or artifacts supplied by the instructor, and determine the type of metal based on its present form.







Conclusion:

Check the answers with your instructor. Discuss any discrepancies, and your reasons behind your guesses.

Questions for Further Study:

- How do you think the types of metal artifacts buried in the soil affects the results of an archaeological dig?
- How does the geographical location and weather affect the results? (Think about archeological digs in other parts of the world!)
- How do you think the type of metal affects the archaeological record? Do you think there are any “missing” metals due to complete disintegration?

Grading Rubric:

	20	15	10	5	0	Grade Received
Lab Chart	Lab chart completed with detail	Lab chart completed, but not detailed	Lab chart done, but missing one or two parts	Lab chart done, but missing more than two parts	No chart done	
Results	Results from the lab are compared to the activity series, and well – developed comparisons are given	Lab results are compared, but comparisons are not well-developed	Lab results are compared, but one or two results are missing	Lab results are compared, but more than two are missing	No comparison	
Colors research	Color is correctly researched for all metals	Colors are correctly researched, but one or two are missing	Colors are researched, but two or more are missing or incorrect	Colors are incorrectly researched	No colors researched	
Hypotheses	Hypotheses for each metals are well written and based on labs and research	Hypotheses for each metal are not well-written, but are based on labs and researched	Hypotheses for metals are written, but one or two are missing	Hypotheses for metals are written, but two or more are missing	No hypotheses written	
Identification	Identities of all metal artifacts are given, and discrepancies are noted	Identities of artifacts are given, but one identity or discrepancy is missing	Identities of artifacts are given, but two identities or discrepancies are missing	Identities of artifacts are given, but three or more identities or discrepancies are missing	No identities of artifacts are given	
Answers to questions	Thorough answers to all three questions , written in complete sentences	Answers to all three questions, but not thorough OR in complete sentences	Answers are complete, but one is missing	Two or more answers are missing or incomplete	No answers are supplied	

# Post-Visit Extension Activities

The following extension activities may be utilized as follow-up to your visit to Independence National Historical Park, or for assessment purposes.

1. Create a brochure on Dexter for visitors to Independence National Historical Park. Be sure to include the contributions of archeology in learning about this man.
2. Write a letter to the editor about the importance of archeology and historic preservation. Make it specific to a site in your city if possible.
3. Research other kinds of archeology (besides urban archeology). Examples include industrial, underwater, experimental, and classical archeology. What are the similarities and differences to historical archeology in an urban setting?
4. Go back to the biography you wrote about James Dexter and learn about the events that happened during his lifetime like the French and Indian War, the American Revolution, Philadelphia becoming the nation's capital, the yellow fever epidemic, the passage of the Fugitive Slave Act, and the US Government moving to Washington, D.C.. Then rewrite your Dexter biography adding in the new information you learned about the time period.
5. Revisit the biography you wrote about James Dexter and fill in more details about what went on in his household using the information you learned that archeologists found out by excavating the site of his house. (Remember the lesson you completed during your field trip to Independence National Historical Park's Archeologist's in the Making Learning Lab.)
6. Use the information you have learned from both the pre-visit lessons and your visit to Independence National Historical Park to write a resume for James Dexter.
7. Look for examples of archeology in popular culture such as movies, books, and television. Then, using your understanding of what archeology is and what archeologists do, write a commentary describing if your example is an accurate portrayal of archeology.

# Vocabulary

**Anthropology**- The study of the origin, the behavior, and the physical, social, and cultural development of humans. Anthropology studies humanity from the earliest times up to the present. Anthropology is broken into four subcategories: archeology, cultural anthropology, linguistics, and physical anthropology.

**Archeological “Context”**- Archeologists use the term “context” to describe the observable stratigraphic units, which include specific layers or deposits of soil, or features such as post molds. Archeologists dig according to the different contexts that they find within the site, starting with the excavation of the most recently deposited context and moving back in time or deeper in the ground. Artifacts are bagged, analyzed and eventually stored according to context. Artifacts within each context can be used to date the context and help to determine the date or timeline of the history of the entire site.

**Archeologist**- Someone who uses scientific methods to study the material remains of past human life and activities. As scholars and scientists, archeologists do not collect artifacts for profit or personal use.

**Archeology** (also spelled archaeology in the U.S.) - The scientific study of how people lived in the past through analysis of material remains uncovered during scientific excavations or digs.

**Artifact**- Anything made and /or used by humans, including tools, containers, and food remains. Buildings are also artifacts, but archeologists usually apply the term “artifact” only to portable items.

**Excavation**- An archeological dig.

**Feature**- A non-portable artifact that cannot be moved without destroying it. Examples of features include wells, privy pits, walls, and fence posts.

**Historical Archeology**- The study of archeological sites from the modern period in conjunction with historical records and other kinds of information.

**Material Culture**- A term given to objects that people use on a daily basis that reveal facts about their lives.

**Post Mold**- A type of feature; a circular stain left in the ground after a wooden post has decayed. It usually indicates the former existence of a house or fence.

**Primary Source-** Made by people who actually saw and wrote about a historical place or activity at the time when that activity happened.

**Provenience-** A specific location where an artifact or feature is found in the ground.

**Secondary Source-** Made by people who learned about the place of events from someone else or by looking at primary sources.

**Stratigraphy-** Used as a relative dating technique to assess the sequence of artifact position .

**Urban Archeology-** Urban archeology usually occurs when land is being cleared for new buildings or older buildings are being torn down. Archeologists are called to excavate the sites in order to collect and preserve the artifacts. This type of archeology is many times considered a rescue excavation because of the time pressure of the builders and construction crews.



# Resources for Teachers and Students

## Websites

<http://www.nps.gov/archeology/sites/npSites/franklincourt.htm>

Learn about archeology at Franklin Court. This website has information on the basics of archeology all related to Benjamin Franklin and life at Franklin Court.

<http://www.sha.org/>

The Society for Historical Archeology's website has a special section for kids to learn about careers in Archeology.

<http://www.nps.gov/archeology/public/kids/index.htm>

Here you will find activities, resources, and much more for encouraging a child's interest in archeology as well as encouraging stewardship for archeological heritage.

## Books

*Archaeology for Young Explorers: Uncovering History at Colonial Williamsburg* by Patricia Samford and David L. Ribblett. The Colonial Williamsburg Foundation (1999).

*Archeology for Kids: Uncovering the Mysteries of Our Past* by Richard Panchyk. Chicago Review Press (2001).

*Breaking Ground, Breaking Silence: The Story of New York's African Burial Ground* by Joyce Hansen and Gary McGowan. Henry Hold & Company (1998).

*The Buried Past: An Archaeological History of Philadelphia* by John L. Cotter, Daniel G. Roberts, and Michael Parrington. University of Pennsylvania Press (1992).

*The Diary of Elizabeth Drinker* edited by Elaine Foreman Crane. Northwest University Press (1991).



The National Park Service cares for special places saved by the American people so that all may experience our heritage.

As part of the National Park Service, Independence National Historical Park is committed to providing quality educational experiences to teachers, school children, families, and adult learners through the Independence Park Institute.

The educational goals of the Independence Park Institute include:

- developing curriculum-based school programs and educational materials for visiting classes
- conducting professional development workshops for teachers
- creating standards-based pre-visit and post-visit lesson plans that teachers can use to make the student's experience more relevant and meaningful while at the park



Our ultimate goal is to connect all learners, both intellectually and emotionally, to the resources and stories of Independence Hall, the Liberty Bell, Franklin Court, and the many other sites at Independence National Historical Park that center on the ideas and ideals that led to the American Revolution and the founding and growth of the United States.